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An alternative Post Keynesian framework for understanding capital flows to emerging markets

Abstract

This paper represents a contribution to the establishment of a framework for the analysis of international capital flows, with a specific focus on emerging markets. It is based on a "monetary" analysis of the economy, and the works of Hyman Minsky and Jan Toporowski in particular. The key aspects of such an approach are, firstly, that in a monetary economy capital flows need to be understood as "flows of funds" and pertaining to the realm of financial choices, as opposed to the traditional understanding of capital flows based on "real" variables, such as saving and investment. A consequence of this is the need to focus on gross rather than capital flows. Secondly, liquidity preference considerations also apply at the international level, particularly in relation to the liquidity of emerging markets' currencies, which in turn depends on context-specific "Keynsian fundamentals". Thirdly, the rise of institutional investors is the key historical development in the financial system, shaping the current reality of cross-border capital flows, including to emerging markets. It is argued that their liabilities, in light of the theories of Minsky and Toporowski, are one of the most important variables in determining their portfolio choice. This paper synthesises these elements by understanding capital flows to emerging markets as the demand for emerging markets' assets by institutional investors. A framework categorising the various channels guiding such a demand is proposed.

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Introduction and Background

Capital flows to emerging markets are known to be pro-cyclical and volatile. Boom and bust financial cycles in these countries have frequently been accompanied by huge inflows of foreign capital and their subsequent leave. Since the early '90s, researchers have been trying to develop empirical and theoretical frameworks to understand the causes of this phenomenon. Generally speaking, the findings of the conventional literature appear to fall broadly into two main categories:

- Characteristics of emerging markets' assets: fundamentals and market imperfections
- Investors' risk appetite

The first category has been subject to a much deeper analysis. Any factor affecting the risk-return tradeoff of emerging markets' assets fits into this category. Most of the literature has been concerned with understanding which fundamental factors attract or push away capital flows to these countries. Typically, such fundamental factors are distinguished as either domestic, such as the level of economic growth, or external factors, such as global interest rates[1]. Market imperfections, particularly informational asymmetries, are also thought to play a role in determining how investors may sometimes fail to recognise fundamentals for what they are, giving rise to "puzzling" phenomena such as herding behaviour, momentum trading, contagion and equity home-bias[2].

Investor factors have become central as explanatory factors in more recent years. The idea that risk appetite is volatile, and crucially depends on factors such as the macroeconomic environment or agents' balance sheets, has become a key research topic. Changes in capital flows to emerging markets and their consequences for asset prices are explained by changes in investors' global appetite for risk, regardless of emerging markets' asset characteristics

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themselves. The importance of this factor, documented by a rapidly expanding literature[3] opens up major issues regarding financial stability in emerging markets; even if fundamentals matter, and policy-makers try to implement policies that stabilise and contain the impact of changes in fundamentals, emerging markets can still be hit by global risk appetite swings. It is indeed also on these grounds that the IMF has reconsidered its position on capital controls, which can be adopted at least as a temporary policy of last resort (IMF, 2010, 2012), a view shared by other prominent economists (Obstfeld and Rogoff, 2009; Lane, 2012; Rey, 2013).

While the literature represents a very useful starting point to explore the issue of capital flows and asset prices in emerging markets, a number of limitations can be identified.

Firstly, the literature tends to over-aggregate different kinds of investors. In a world with multiple private agents making international investment decisions it is important to understand which sector in the economy is driving capital flows. Moreover, it is key to understand the precise nature of the investor driving such flows (e.g. banks, pension funds, sovereign-wealth funds). While some micro-level literature assessing the role of mutual funds exists, the macroeconomic literature focuses on foreign claims and flows between countries. In short, there is a need to take into account the evolution of "investors" through historical time and space.

Secondly and directly stemming from the previous point, the process of portfolio choice is confined to the analysis of the asset characteristics and its economic and financial environment. In most of the literature, the implicit - or sometimes explicit - presumptions is that, if it were not for market imperfections, standard portfolio theory would hold. While undoubtedly the risk/return profile of an asset plays a major role, investors may have additional goals and constraints driving their portfolio choice. The increasing focus on risk appetite expands the portfolio choice mechanism. But once again, it is important to locate risk appetite in the actual operations of the historically determined nature of "investors".

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Finally, much of the reviewed literature remains ultimately grounded on a *real* analysis of the economy. This is the case in recent models that are essentially based on a loanable funds market mechanism (Caballero et al., 2006), where interest rates are determined by the equilibrium between saving and investment. Even in the more recent general equilibrium models with multiple assets and imperfect capital markets, the portfolio choice is between foreign and domestic assets, which represent a claim on real output, whereas money either does not even exist and prices are expressed in terms of a "numeraire" good (Tille and van Wincoop, 2010), or determines the price through a quantity theory of money approach (Devereux and Sutherland, 2009). The dynamics of capital flows are thus determined by what are ultimately real economic decisions, chiefly the inter-temporal consumption choice of economic agents, who determine aggregate saving, and consequently the dynamics of current accounts and capital flows.

This last point applies quite clearly to the "push-pull" factors framework and much of the partial and general equilibrium analysis emphasising the role of market imperfections. On the other hand, the recent developments do partially overcome this limitation. The increasing consideration of monetary and financial factors, such as the FED monetary policy, the balance sheets of financial intermediaries and the focus on specific financial actors - banks or institutional investors -, and more in general the attention to the gross two-way flows clearly go beyond a purely "real" analysis of the economy.

However, the analysis is not wholly brought to its ultimate logical consequences. This is best exemplified by Obstfeld (2012), who argues that the expansion of cross-border transactions can be conceptually understood as trading future consumption for future consumption, rather than current consumption for future consumption, as in the case of current account imbalances. These two-ways claims on future consumption, unlike current accounts, are not inherently constrained: "at any point in time, the size of the current account

imbalance is limited by output sizes and the sizes of predetermined international assets and liabilities — but there is no limit to the number of times funds can be recycled in different forms between Home and Foreign" (p. 470). The analysis of Obstfeld however seems to remain rooted in the inter-temporal consumption choice framework: the "asset-to-asset" transactions originate in the consumption choice of representative households, to which the internationally traded "funds" can be traced back. Even in this analysis, asset and liabilities are ultimately seen as claims on real resources, rather than monetary claims [4].

The aim of this paper is to explore insights from the Post Keynesian and other economic traditions to enrich the themes emerging the literature and overcome the highlighted limitations. This is done, firstly, by recognising the crucial importance of conducting a monetary analysis of the economy. A monetary analysis, in Schumpeter (1954)'s words:

"introduces the element of money on the very ground floor of our analytic structure and abandons the idea that all essential features of economic life can be represented by a barter-economy model ... it has to be recognized that essential features of the capitalist process may depend upon the 'veil' and that the 'face behind it' is incomplete without it".

Post Keynesian economists have long worked within such a framework, seeking to understand the importance of money for the workings of a capitalist economy. Key insights in these respects include the theory of liquidity preference, as a theory of money stocks demand - and portfolio choice in general[5] - and the theory of endogenous money, as the demand for credit money as purchasing power [6]. Particularly important for this paper is the work of Minsky (1975), who conceptualised of a monetary economy as the interaction of the balance sheets and the resulting cash flows between economic units, and the behaviour of such units as being dependent on their balance sheet and cash flows. However, an explicit recognition of the implications of a monetary analysis of the economy has often been confined within a closed-economy conceptualisation, despite clearly having important

implications for cross-border capital flows, as this paper will emphasise. This paper will combine these implications with the existing theories of exchange rates and currency hierarchy based on Post Keynesian theories of liquidity preference, which imply that the lower liquidity of emerging markets currencies determines the peripheral role of their financial assets in investors' portfolio.

Secondly, alternative schools of thought have underlined the importance of grounding economic analysis in historical developments and institutional settings, rather than purely abstract ideal types. This paper argues that a key contemporary historical development in financial markets is the rise of institutional investors. Insights from Minsky's institutional theory and Toporowski's theory of capital market inflation inform the theoretical implications of such a development, chiefly by highlighting the role of liabilities in determining portfolio choice.

Finally, bringing together the first two steps, this paper will synthesise the implications of a monetary theory of capital flows to emerging markets with the historical rise of institutional investors. It will be argued that capital flows to emerging markets can be understood as the demand for emerging markets' assets by foreign institutional investors. Understanding the mechanism behind such a demand is therefore crucial to understanding the determinants of capital flows and their stability. Crucially, these will depend on the characteristics of both investors and emerging markets' assets, as in the conventional literature, but the results will be greatly enriched by considerations given to liquidity preference theory, and the specific behaviour of institutional investors, in particular the central role that liabilities have in determining their portoflio choice.

This paper is divided into four sections. In section one, the paper applies existing Post Keynesian monetary theory to the context of capital flows and emerging markets, firstly by pointing out the "monetary" nature of capital flows, and secondly by studying the relationship

between liquidity preference theory and currency hierarchies. Combined, these suggest an understanding of capital flows as international asset demand in a monetary world economy, where emerging markets assets occupy a peripheral position. In section two, the paper will highlight the rise of institutional investors as a major development that bears considerable relevance in the process of global financial integration. Section three, based on all of the previous insights, develops a framework that considers the various factors affecting institutional investors' demand for emerging markets' assets. Section four concludes.

1 Post Keynesian monetary theory in the open-economy

1.1 International monetary flows

The monetary view of the economy based on Minsky's theory, whereby agents interact by engaging in financial transactions and holding claims on one another, can be extended to the context of an open economy. Clearly, in a monetary open economy, capital flows are nothing but financial transactions between economic units located in different countries. A monetary analysis needs to consider capital flows as "flows of funds", rather than transfers of "real" resources, as a result of which some units will hold claims on foreign units which in turn incur liabilities for foreign units. As Carvalho (2009, p. 19) puts it, "foreign investment should not be confused with "real" resources, just as domestic savings should not be confused with surplus corn. Cross-border financial transactions ... by themselves they represent the circulation of foreign currency, not of real goods or real capital".

Although this view is a natural implication of a monetary analysis of the economy, its direct consequence is to break down the conventional analytical link between capital flows and current accounts. Current accounts are the outcome of decisions pertaining to the "real

economy" or, in "accounting terms", economic units' income accounts: saving and investment or imports and exports. In a monetary economy these have a financial transaction counterpart in the capital account, which can be divided, mirroring Minsky's definitions, into income flows (the trade in goods and services) and balance sheet flows (net factor income). However, financial transactions may also have nothing to do with these decisions. These "portfolio transactions" - that is, transactions resulting from the purchase and sale of existing and newly-created assets - are logically distinguished from the current account, and can be - and are in practice - several orders of magnitude higher than income and balance sheet flows.

To capture the dynamics of such transactions one needs to focus on gross flows rather than net flows, as a recent paper by Borio and Disyatat (2011) vividly argued. The authors claim that the focus on net flows arises out of a confusion between "saving" and "financing": in a monetary economy, saving is nothing but income not consumed which has no necessary relationship, let alone a causal one, with financing, a cash flow concept representing a monetary transaction. In the open-economy the same distinction can be made between current accounts - or net capital flows - and gross capital flows, where the former only represent the difference between saving and financing of an economy as a whole, whereas the latter represent all cross-border financial transactions.

A number of implications follow. Firstly, gross capital flows bear little relationship to current accounts because most financial transactions result in zero-net flows. An example can clarify this point: suppose a US private resident purchases a UK security, denominated in British pounds sterling. This represents an increase in US claims to the UK and thus a gross outflow. However, to purchase the security, the US resident must pay for it in pound sterling, which leads her to either run down any reserves he might have in that currency, or exchange his dollars for British pounds in either a US or a UK bank (at least indirectly). This results in either a reduction of gross outflows or an increase in gross inflows, thereby offsetting the

initial transaction. As a result, although financial transactions have occurred, and new two-ways claims have been established, no net change in capital flows will result.

Secondly, by implication, this means that the current account does not reveal much about how investment in a country is financed. "Even if, say, a country's current account is in balance, or no imports and exports take place at all, the whole of its investment expenditures may be financed from abroad" (p. 9).

Thirdly, it is wrong to link any specific type of gross flow to the current account. Specifically, this points relates to the widely-held view that current accounts are needed to accumulate reserves. Reserve accumulation is, however, a financial transaction that generates offsetting flows and, for it to occur, there only needs to be a gross inflow of foreign currency, which may not necessarily be related to the current account. Finally, this is clearly even more valid in the presence of multilateral capital flows: "in terms of national income accounting, deficit countries are compensating for the non-consumption of surplus countries. In this sense, current account deficits are matched by saving in other regions. But the underlying consumption and investment expenditures that generate such imbalances may be financed in a myriad of ways, both domestically and externally" (p. 10).

The relevance of these arguments can also be shown empirically. As Figure 1 and 2 show, gross capital inflows and outflows have grown substantially. Although a large part of inflows are foreign direct investments, the increase in portfolio and other - i.e. banking - flows is also evident. Portfolio inflows in particular have grown from 16% in the 2000-2008 to 27% in the post-crisis period as a share of total inflows. These trends can hardly be inferred by looking at current accounts, as shown in Figure 3, which experienced very large surpluses in the pre-crisis period and then decreased since 2009 to an essentially balanced position. The figures also make clear that the patterns capital flows are predominantly the outcome of advanced

countries private institutions decisions, as most of the gross capital outflows from emerging markets are foreign exchange reserves. But, rather than financing current account deficit, "what those foreigners provide to the developing country in terms of foreign finance is more or less automatically parked in low-yielding international reserves", as Bibow (2008, p. 23) claims.

[Figure 1 about here.]

[Figure 2 about here.]

[Figure 3 about here.]

From a theoretical perspective, this view is alternative to "real" and loanable funds theories of capital flows. It goes beyond Obstfeld's (2012) view presented in the introduction, which sees gross positions as repeatedly exchangeable but ultimately as claims on real resources. It also goes beyond applications of Minsky's Financial Instability Hypothesis to the boom-bust cycles and financial crises in emerging markets (Kregel, 1998; Arestis and Glickman, 2002; Schroeder, 2002; Onaran, 2007; Frenkel and Rapetti, 2009)[7]. In this line of inquiry, capital flows add to the domestic build-up of financial fragility in emerging markets. In particular, financial liberalisation - both domestic and capital account - kicks off the boom phase of the cycle: high interest rates and good growth prospects attract foreign capital, which in turn eases the financing conditions in the economy, increasing the liquidity of financial markets and institutions. The economy will then experience a credit boom, with rising asset prices. At the same time, the real exchange rate appreciates, following nominal exchange rate appreciation and/or increasing prices of non-tradable as a result of the boom in aggregate demand, generating a current account deficit. As the boom proceeds, more economic units will present an increasingly fragile financial structure, by short-term borrowing, often in foreign currency - as the cost of borrowing abroad is lower, given the

interest rate spread and the real exchange rate appreciation of the domestic currency. At some point, however, the fragility of the economy would be such that either some endogenously generated problems occur in the domestic economy (e.g. a bank failure), or international investors start to doubt the soundness of the economy and begin to decrease their exposure to it or even speculate against its currency. Either way, financial fragility will quickly turn into a financial crash, with the dramatic fall of the exchange rate and higher interest rates, which will create extremely serious situations.

While these theories accurately depict the dynamics of the emerging markets' crises in the late '90s, recent events cast doubts about their validity as a general theory of open economy boom-bust cycles. The pre-2008 cycle of capital flows to emerging markets presents some substantial differences from the story outlined above. First of all, most emerging markets had solid "fundamentals", such as government fiscal soundness, or limited firms' and banks' leverage; secondly, they received massive capital inflows despite their current account surpluses, as indicated in figure 3; thirdly, the highly destructive phenomena of currency mismatches was much more contained than in the past, given the lower reliance on foreign currency borrowing; fourthly, as figure 2 shows, they accumulated unprecedented levels of foreign exchange reserves, as a shield against both the likelihood and the consequences of a financial crisis. This did not prevent, in late 2008, massive capital outflows from emerging markets, with asset deflations and exchange rate falls, and a generalised, albeit less severe than in the past, economic crisis. Theories that ultimately link financial crashes to unstable domestic financial systems, and those in which capital flows simply amplify or trigger phases of the cycle, are therefore not well equipped to analyse the recent trends of financial globalisation. Therefore, the existing literature's application of Minsky's financial instability hypothesis to balance-of-payments crises cannot be considered a generally applicable

characterisation of capital flows cycles, to the extent it tends to place an unnecessary high focus on current accounts and domestic credit booms.

Theoretically, the limitations of these theories can be traced back to their insufficiently clear distinction between gross and net capital flows. Once it is recognised that current account imbalances do not necessarily play a role in emerging markets' financial crises: since a great deal of capital flows consist in portfolio transactions, it becomes clear that the deterioration of domestic macro-financial stability is neither a necessary or sufficient condition for boom-bust cycles of capital flows[8]. In a "monetary" economy, the determinants of capital flows need to be understood as the drivers of such "portfolio transactions", which may or may not be related to the build-up of internal financial fragility and the dynamics of the current account.

1.2 Fundamental uncertainty, currency hierarchy and liquidity cycles

Post Keynesian economists have long emphasised the role liquidity preference in an uncertain world. In financial markets, portfolio transactions by economic units are considered to depend largely on conventions, and the belief about how the market as a whole will align to such evolving conventions. In the context of the open-economy, Post Keynesian theory has especially focused on the determination of the exchange rate as a result of such mechanisms.

The work by Harvey (2010) is probably the most renowned application of Post Keynesian concepts of uncertainty and expectations to the theory of exchange rates and capital flows. The theory is chiefly based on the concept of fundamental uncertainty, whereby expectations about asset prices are mostly based on conventions and psychological factors, in the absence of stable probability functions. Market sentiment is therefore the crucial determinant of financial market expectations, which drive short-term capital flows are the key variable of interest, and in turn exchange rates.

Under this view, capital flows and foreign exchange markets are a prime example of a "beauty contest". Fundamentals may play a role only insofar as they represent relevant indicators to drive exchange rates expectations, as participants are "guided by mental models of the currency market that are in turn based on experience and scholarly and professional research" (Harvey, 2006, p. 164). However technical factors, as well as behavioural factors are likely to be just as pervasive.

Other Post Keynesian authors also start from liquidity preference, but take a less "fundamentalist" [9] approach. The theoretical framework of reference is the theory of the own rate of interest in Keynes' General Theory chapter 17. Accordingly, different assets have different liquidity premia, depending on their ability to function as a means of payment or store of value, and have a corresponding rate of return. In the open economy the crucial aspect determining an asset's liquidity is its currency of denomination. Capital flows must therefore be understood in relation to the conditions of the international monetary structure, which determine the liquidity of currencies. Some Post Keynesian authors have characterised this with the notion of "currency hierarchy", according to which different currencies have different liquidity premia, based on their ability to store value and exchange medium (Terzi, 2005; Andrade and Prates, 2013). In this hierarchy emerging markets remain in a lower position, with their currency being exchangeable internationally but only working as a limited store of value, and therefore carrying a low liquidity premium. This contributes to justify the high interest rates that assets in emerging markets generally offer compared to assets denominated in core currencies.

Kaltenbrunner (2011, 2015) expands this view, developing a comprehensive framework for the analysis of the exchange rate and capital flows, mostly based on the work of Minsky (1975). The central contention of her work is that a currency's liquidity premium does not only depend on its role as a store of value, but is crucially determined by its ability

to be used to meet outstanding obligations; that is, to use assets denominated in that currency to cover liabilities funded in the reserve - core - currencies.

Several factors will in turn affect this ability. First is the stock of a country's foreign liabilities, which comprises the foreign currency debt typical of boom-bust "Minskyan" cycles described above. Kaltenbrunner however also goes beyond that, in arguing that any accumulation of foreign liabilities exposes the country to heavier impacts on its financial and currency stability. Second is the ability to generate foreign currency flows to meet outstanding obligations through income generation, i.e. through trade and net factor income surpluses - a condition which emerging markets unsurprisingly often seek to achieve. Finally, is the ability to face foreign liability commitments by selling assets, including the "institutional liquidity" of a country's financial markets.

In synthesis, a country's currency will have a higher liquidity premium, the lower its (net) exposure to foreign investors, and the higher its capacity to face those obligations through either income/balance sheet flows or portfolio transactions. In determining a currency's liquidity premium, any indicator of the evolution of these factors could therefore be regarded as a "Keynesian fundamental", around which market conventions will be catalysed. Foreign exchange reserves in particular can be interpreted as a crucial determinant of emerging markets currency liquidity, since they effectively represent a country-level hedge of foreign liabilities. Indeed, the primary role of foreign exchange reserves is precisely to dampen exchange rate volatility, providing direct support to the "institutional liquidity" of foreign exchange markets.

Emerging markets have historically presented vulnerabilities in all these "Keynesian fundamentals". They have a long history as "bad borrowers", highly unstable exchange rates, and in general their currency cannot readily be used to face international liabilities. Emerging

markets assets therefore have lower liquidity premia, and as such occupy a subordinate and peripheral position among financial assets.

This goes a long way in explaining the equity home-bias "puzzle". Since emerging markets' currencies cannot be used to face international obligations directly, emerging markets assets carry a structurally lower liquidity premium, and it is logical to see them in small proportions within foreign investors' portfolio. Imperfect asset substitutability is a natural consequence of a monetary analysis of capital flows, where different currencies have different capabilities to serve as money.

Furthermore, the lower liquidity of emerging markets' currency makes them subject to unstable patterns of capital flows and exchange rates, as investors will quickly turn to more liquid assets when their liquidity preference increases, i.e. during a crisis. These patterns, as Biancareli (2009) argues, can be characterised as "liquidity cycles". Capital flows to emerging markets are always "a consequence of a reduction in liquidity preference in the international level" (p. 9). This is because, in addition to the inherent instability of contemporary capital flows, emerging markets face the additional problems of being in a subordinate position in the currency hierarchy: emerging markets assets, being a risky non-core part of an investors' portfolios - due to the lower liquidity of their currency of denomination - are subject to sudden losses of confidence and thus likely to be liquidated quickly in times of turmoil. Hence, "the power of domestic "fundamentals" - which can, of course, reinforce a trend already in progress or compensate its effects - are clearly subordinated to more important forces" (Biancareli,2009, p. 11). Momentum strategies and "herding" behaviour appear in this light less puzzling.

The theory of currency hierarchy is therefore a powerful component for the analysis of capital flows to emerging markets. In line with the discussions made in the previous section, capital flows are seen as monetary transactions, resulting from international investors'

changing liquidity preference[10], and the interaction that such a preference depends on the liquidity premium of currencies – i.e. their ability to be used as 'money'. The specificity of emerging markets lies in the the lower liquidity of their currencies, which makes their assets a peripheral and more volatile component of investors' portfolio.

1.3 International asset demand

In sum, the extension of the key features of Post Keynesian monetary theory to the context of capital flows and emerging markets can be syntehsised in seven main points:

1. Firstly, it allows for the recognition that capital flows are flows of funds, coming from and going to money stocks, and therefore pertaining to the analysis of capital account changes;
2. Secondly, as a result, the focus should be on gross rather than net flows, as the latter simply reflect the financial transaction related to income flows, whereas international flows can be several times higher than their net result;
3. Thirdly, in today's world, most of these flows of funds are portfolio transactions - i.e. purchases and sales of assets;
4. Fourthly, an economic unit's portfolio choice at the international level remains subject to fundamental uncertainty, in particular, with respect to the currency of denomination;
5. Fifthly, a crucial determinant of portfolio choice will be therefore the liquidity of the currency, which in turn depends on the systemic "Keynesian" fundamentals that determine the ability of such currency to be used to face liabilities. This provides a clear rationale for the notion of imperfect asset substitutability;

6. Sixthly, capital flow cycles result from the changing liquidity preferences of international investors,

7. Seventhly, due to lower liquidity of their currency, emerging markets are a peripheral components of portfolios, which results in cyclical and volatile capital flows;

Capital flows can therefore be understood here as international asset demand, the demand that foreign investors have for a country's assets. They are the result of a financial decision rather than a real one, and will thus be subject, in line with the Post Keynesian literature, to liquidity preference considerations. Emerging markets are at a disadvantage, due to the lower liquidity of their currency, which makes their financial assets by definition a marginal and risky investment, subject to greater volatility of demand.

These elements are key to a proper understanding of the patterns of capital flows and address most of the issues raised in the introduction about the conventional views, chiefly the full appreciation of the 'monetary' nature of the phenomenon of capital flows. However, they do not fully address the issue of the nature of investors. To paraphrase Kalecki, countries do not invest as a whole, and therefore it is important to understand which economic units within countries are investing in foreign assets and why, and as such locate these theories within the historical developments of the financial system. Kaltenbrunner (2011) does in fact acknowledge the importance of distinguishing between different types of investors, as the behaviour and motives of different institutions may differ.

There is therefore a need to understand the role of the different sectors in shaping the dynamics of gross financial flows. To do so it is important to understand an analysis of institutional characteristics of the financial system in contemporary capitalism. This will be the task of the next section.

2 The rise of institutional investors

2.1 Money-managers and the theory of capital market inflation

Understanding gross capital flows, according to the ideas put forward in the previous section, necessitates going beyond an analysis based on an immutable system. Innovation, following Schumpeter, is a key characteristic of a capitalist economic system. Understanding capitalism as a monetary economy thus requires an historical analysis of the evolution of the financial system. It is important to understand what the key financial innovations are at the core of the process of financial globalisation.

One of the most important financial system developments of the past thirty years is the rise of institutional investors as key actors in the financial markets and in the economy in general. This was the result of the increasing institutionalisation of household savings, especially through the inauguration of funded pension schemes, which has characterised (primarily) Anglo-Saxon countries since the late ’70s. Institutional investors and asset managers, as claimed by Grahl and Lysandrou (2006), have become a mass industry serving large parts of the population, so that they effectively determine the very large trading volume that exists in capital markets nowadays. The importance of institutional investors for contemporary capitalism is also highlighted by the fact that some scholars, quite independently from each other, have addressed it as the most important development in modern economies, going so far as to dub contemporary capitalism as “pension fund capitalism” or “money-manager capitalism”.

These views do not appear unreasonable when assessed against the empirical evidence. Institutional investors represent a substantial component of financial markets. As shown in figure 4, at the end of 2014, they collectively owned about 45 trillions of US dollars, about 60% of global GDP or 30% of total world bonds and stocks outstanding. The figure also shows how institutional investors are highly concentrated across countries: the US, the UK

and Japan accounted for about 80% of total institutional investors assets, a figure that has barely changed over the past 15 years.

[Figure 4 about here.]

Hyman Minsky was one of the first scholars to recognise the relevance of the rise of "money-managers" for the structure of American - and global - capitalism. While Minsky is mostly known for his "Keynes-inspired" theories of the business cycle, which gave rise to the Wall-Street paradigm and the Financial Instability Hypothesis, in the late stages of his career he focused on long-term trends of capitalism development. His work starts from a reappraisal of Schumpeter[11] who, along Marx and Keynes, "define the problem that economic theory must explain as the path of development of an accumulating capitalist economy through historical time", which "do not lead to smooth progress but rather to 'explosions' and breakdowns ... crises are the normal result of the capitalist process" (Minsky, 1983a, p. 2). This gives rise to a view of "economies as evolving systems, systems that exist in history and change in response to endogenous factors ... history doesn't lead to an end of history" (Minsky, 1992, p. 104). Hence, there is a need to formulate historically grounded theories: "He [Minsky] firmly believed that general theories are either plainly wrong, or are simply too general to be of any use ... institutions must be brought into the analysis at the beginning; useful theory is institution-specific" (Papadimitriou and Wray, 1998, p. 201).

With this theoretical framework Minsky analysed the evolution of US capitalism. He divided that it four stages: commercial, finance, managerial and money manager capitalism[12]. Money manager capitalism emerges out of the relative stable phase of managerial capitalism, with the institutionalisation of funded pension schemes which integrated and/or replaced social security system based pensions. This led to vast accumulation of savings stocks that were entrusted to external fund managers, who became the new key actors in the economy.

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The behavior of these managers led to remarkable changes in the economy. Firstly, with the the rise of managed-money funds most companies' shares were actively traded by money-managers, whose sole interest is to maximise the financial return of their managed portfolios, resulting in major emphasis by corporate managers on short-term profits and companies' valuation. Secondly, since fund managers do not generally value control and long-term holding of securities, they tend of accept "offers" that improve their portfolio, hence facilitating security exchange for the purpose of highly speculative merger and acquisitions activities such as and leveraged buy-outs. Thirdly, money-manager capitalism increases the scope for international diversification, as money managers are always striving to find ways to improve their returns. Finally, money managers will also tend to exhibit herding and momentum behaviour, given by the incentives to follow benchmarks of their performance evaluation structure (Menkhoff, 2002; Liang, 2011).

Another useful theoretical framework to analyse the increasing importance of institutional investors is "the theory of capital market inflation", which was formulated by Toporowski (2002) and subsequently developed in later works (Toporowski, 2010). The theory provides a disequilibrium - alternative to standard finance theory inspired by various versions of the efficient market hypothesis and the capital asset pricing model - theory of financial markets mechanism. It argues that the inflows of funds into the capital markets is what effectively determines the general level of security prices: whenever the supply of equity capital is higher than demand by firms, a net excess inflow of funds enters capital markets. This net excess inflow is traded within the market by financial intermediaries and inflates the price of securities. This process lasts "until effective prices reach a level that elicits the issue of sufficient new stock to take up the positive net inflow, or until the positive inflow ceases" (p. 34). Once the supply of equity capital becomes smaller than its demand and the cumulated excess inflows dry up, the rising illiquidity leads to deflation. The

historical process, according to Toporowski (2002), that originated the process of capital market inflation was the creation of funded pension schemes in the late 70's[13]. The introduction of pension funds created a huge and sudden inflow of funds into the equity markets that pushed up securities price. At the same time the decline of funded pension schemes poses an ultimate constraint on the process of capital market inflation: as pension funds reach "maturity", i.e. the situation by which the pensions expenses exceed the contributions, the decline of their investment will lead to more "bearish" markets and eventually to deflation. Thus in the the long-run capital market inflation is unsustainable, creating potential issues for both pensioners security and financial stability more in general.

There are clearly points in common with the theory of capital market inflation and the economics of Minsky. Indeed, Toporowski (2002, p. 6) considers Minsky as "the writer whose work is most immediately developed in this book", and in a later paper (Toporowski, 2000, p. 4-6) he specifies the links between his theory and those of Minsky, suggesting two main points of connection. The first is Minsky's concept of "layering", the "pile" of claims that units have on each other in the financial system which, in the case of a large-scale inability to meet such claims in a sub-sector of the economy, could bring about the generalised collapse of the system. Toporowski argues that this is in fact the situation with pension funds: in a situation of sufficiently large-scale maturity, the need to sell assets in order to meet pension commitments would make the security prices collapse, thus generating widespread insolvency in the pension fund sector. Secondly, Toporowski refers to Minsky's famous taxonomy of the financing structure and argues that the current structure of the capital market is essentially a big Ponzi scheme, in which units seek capital gains that depend on a continued inflow of funds into the market.

A more general, albeit implicit, link between Toporowski's and Minsky's theory, is the focus on the liability side of balance sheets as a determinant of investment choices. Just as

Minsky's economic units choose their asset composition on the basis of their liability structure, in the theory of capital market inflation institutional investors will purchase securities depending on the maturity and size of their liabilities. This is most clearly expressed in a subsequent paper (Toporowski, 2010), where it is argued that institutional investors' net purchase of equity depends on their net cash flows: whenever the contributions to the funds exceed the net payments of liabilities, institutional investors will have spare cash to invest in equities. Beyond cash flows, liabilities are likely to have a more general impact on the asset allocation of institutional investors, and on their risk appetite in particular, as it will be discussed in the next section.

The theory of "capital market inflation" and Minsky's concept of "money manager capitalism" all suggest that the historical development of western capitalism has given institutional investors a pivotal position in the economy. These investors are among the most important originators of portfolio transactions in today's capitalism, and therefore their behaviour is crucial to understanding the patterns of financial claims, balance sheets and transactions. The view taken here therefore claims the need to link the insights put forward by the theories of economic development about the changing role of finance through the rise of institutional investors, with a theoretical framework grounded in Post Keynesian monetary theory, as developed in the previous section.

2.2 Institutional investors and capital flows to emerging markets

The view that institutional investors are increasingly important in today's financial markets has become widespread in recent years. Recent work by the Bank of England (Haldane, 2011, 2014), the IMF (2011; 2014) and the Bank for International Settlements (Miyajima and Shim, 2014; BIS, 2011), amongst others, confirm that understanding institutional investors' portfolio choice is key to addressing important global financial

stability issues, including the movements of capital flows to emerging markets. This view is generally shared by authors working in the Post Keynesian and institutionalist tradition, who argue that institutional investors have become prominent actors in financial markets – including in emerging markets –, not always with positive consequences (Harmes, 2001; Menkhoff, 2002; Frenkel and Menkhoff, 2004; Liang, 2011). As shown in figure 5, allocations to emerging markets bonds and equities by institutional investors have grown substantially[14].

[Figure 5 about here.]

The removal of restrictions to capital flows across several countries has made it possible for institutional investors to invest in foreign assets rather easily. Indeed, it could be argued that the growth of international portfolio transactions by institutional investors is an essential characteristic of modern capitalism. Minsky (1988b, p. 35) suggested that as managed funds grow, international portfolio diversification is likely to be an increasingly common phenomenon. He also pointed out (Minsky, 1988a, p. 10) that "the international dimension of the movements from institutions to markets for financing is that the exports and import of capital increasingly takes the form of the purchase of managed and international portfolio diversification by managers of money". The view that financial globalisation and the institutionalisation of savings are closely linked is expressed by Braasch (2010, p. 2):

"The institutionalisation of savings is one of the main drivers of financial globalisation. Given the rapid increase in inflows to such large, cross-border institutional investors, the search for yield and for ways of diversifying risk has forced portfolio managers, working in a highly competitive environment, to channel more funds into hitherto relatively peripheral markets"

Moreover this is linked to the understanding of international financial fragility at the macroeconomic level (p. 3):

"If the behavior of key global market players is not understood, it will be impossible to understand the process of financial globalisation or to achieve significant progress in analysing the causes and implications of financial crises ... This is not about gaining an insight into individual investors' strategies, but about obtaining better data at the aggregate level, in other words for the main investor groups, in order to assess market dynamics, to achieve better and more timely monitoring."

This is the key link between the analysis of portfolio choice, and the international macroeconomic analysis of financial globalisation. Portfolio shifts by institutional investors are a crucial determinant of capital flows in today's world. They are certainly not the only one: international bank credit, short-term highly speculative carry-trade operations by hedge funds or other financial institutions and long-term productive foreign direct investments clearly represent important components of gross capital flows. Nevertheless, given the importance and the size of institutional investors in the modern economy, they are likely to be one of the most important sources of international transactions.

Importantly, the pivotal role of institutional investors reinforces the asymmetry between advanced and emerging markets. As it was shown in figure 4, global institutional investors are predominantly located in advanced economies. One the one hand this strengthens the dominance of core countries currencies, given that institutional investors liabilities are likely going to prefer the have their assets to be denominated in the currency of the country they are located, and in which their liabilities are denominated. Furthermore, due to the lack of a domestic investor base in emerging markets, the liquidity of their financial markets – beside that of the foreign exchange market – will be lower and more fully dependent on foreign

investors. This further confirms that capital flows to emerging markets are effectively the outcome of foreign private portfolio decisions.

Capital flows to emerging markets are thus here analysed as the demand for emerging markets' assets by foreign institutional investors, the flow of funds that they move from/to emerging countries' financial markets (figure 6). However, equipped with the theories discussed so far in this paper, it is clear that motives beyond "diversification" are likely to be relevant. This will be discussed in the next section.

[Figure 6 about here.]

3 Institutional investors' decisions and capital flows to emerging markets

The determinants of capital flows to emerging markets must be based on the understanding of what leads institutional investors to change their demand of their assets. In line with all of the theoretical arguments presented so far, Figure 7 presents an overview of the various channels through which their demands for emerging market assets are determined.

[Figure 7 about here.]

Similarly to the distinction operated in the introduction, one can define the first the first broad category as the asset characteristics. Any factor that affects the risk/return profile of an asset falls into this category. Financial market factors, such as historical volatility and returns, or domestic economic "fundamentals" such as economic growth, or global factors such as commodity prices or the Federal Reserve monetary policy represent common examples. Countries' political stability may also the view of the overall riskiness of an asset. These factors all affect the desirability of an asset according to the traditional theory of portfolio diversification.

However, in line with the views presented in the preceding sections, a much more prominent role needs to be given to liquidity considerations. "Keynesian fundamentals", in particular, determine currency liquidity and therefore the liquidity and stability of a country as a whole. These vary according to the historical and country-specific context, but affect what is ultimately a country's ability to face its external obligations. The accumulation of foreign exchange reserves, a major development over the past fifteen years in emerging markets, may well be liquidity-enhancing from this point of view, as it acts as a systemic buffer against currency swings and insolvency on foreign liabilities.

The second broad category is investors' liquidity preference, which again resembles the conventional views about the risk appetite channel. Global risk appetite in much of the "mainstream" literature is measured by the general level of market volatility, which induces investors to reallocate their portfolio to more/less risky assets. A Post Keynesian interpretation would relate this to fundamental uncertainty about expectations and the general state of general of confidence. In a dynamic "Minskyan" sense, good news slowly increases risk appetite, and reduce liquidity preference, and conversely, financial fragility often turns into a crash due to panic spreading, as in Biancareli's (2009; 2011) theory of "liquidity cycles". Peer-pressures and benchmark following can also exacerbate such processes to magnify the co-movement of liquidity preference and asset prices.

However, risk appetite and liquidity preference are not purely "behavioural" phenomena, but are also affected by institutional investors' balance sheets. In line with Minsky's and Toporowski's theories, the asset structure of an economic unit needs to be assessed in relation to the associated liabilities, which are therefore an essential component of investment decisions. Institutional investors' liabilities, however, are of a peculiar nature since they are contractual long-term obligations, such as future pension incomes to be paid and technical provisions for insurance policies, rather than debt commitments. Institutional investors thus

have small margins of choice in the determination of their liability structure and the cash flow commitments resulting from them. They can change the offer of their products - which is indeed going on with the shift from defined benefits to defined contribution pension schemes - but they clearly lack the flexibility of banks or other investors that manage their short-term funding sources on a daily basis. Since the liability structure is relatively rigid, the asset allocation is the institutional investors' main level of decision.

A key contention of this paper is that the financial conditions of institutional investors' liabilities are crucial in determining their liquidity preference. Such investors have often promised - or at least target - rates of returns; this determines the size of their liabilities, and their main goal is to ensure that their assets are big - and liquid - enough to cover such obligations. In conditions of low returns, assets will grow at a slower rate than liabilities, thus generating potential financial troubles in the long run. As a result, they will engage in a search for assets that can produce sufficient returns to match their long-term liabilities. These assets include emerging market bonds and equities which, although less liquid and riskier, do in general promise higher rates of return. This mechanism effectively implies a reduction in liquidity preference — or an increase in risk appetite — although, rather than a genuine preference or appetite, it is more a "forced" search, induced by the liability structure.

Such processes are far from a purely theoretical possibility. "Liability-driven investment" is an increasingly popular investment paradigm amongst pension funds, whose primary purpose is precisely to put liabilities at the core of the operations of institutional investors (BIS, 2011). Rather than simply optimising portfolios over the risk/return tradeoff, institutional investors split their asset into two components: a liability-matching or portection portfolio, which seeks to hedge the volatility of the institution's liabilities, and a return-seeking portfolio, whose purpose is to generate returns that are high enough to match the growth of liabilities. The liquidity preference - or risk appetite - can in a sense be seen in the

relative proportion of these two portfolios, and the internal composition of the return-seeking portfolio. If, as discussed above, higher returns are needed, the return-seeking portfolio will become a larger proportion of total assets, or will be tilted towards riskier assets. Both processes lead to a higher demand for assets with a higher expected return, which includes emerging market assets.

The third broad category affecting institutional investors asset demand are regulation and other institutional mechanisms. These may for instance be changes in macroeconomic regulations at the international level, such as capital controls or financial transaction taxes, which may promote or contain cross-border investments. On the other hand, there may be domestic regulations and accounting rules that could have a significant effect on institutional investors' portfolio choice. For example, it is likely that regulations that impose capital requirements on institutional investors, such as Solvency II for insurance companies in Europe, may pose a restraint on investments in risky assets, which could affect negatively the size and stability of emerging markets investments.

Finally, although not crucial in the Post Keynesian literature, informational asymmetries and other market frictions may indeed affect the way many of these channels work. For example, agency problems may affect the institutional decisions of a pension fund, or high information acquisition costs may reduce and/or make more volatile the demand for emerging markets assets.

This framework can be useful for the contemporary analysis of capital flows to emerging markets. As these countries have attracted higher allocations from institutional investors, as it was shown in figure 5, such a framework would point to improvements in their "Keynesian fundamentals", such as the accumulation of foreign exchange reserves. Such improvements have undoubtedly made the risk/return profile of emerging market assets more attractive. On the other hand, it is highly likely that the low interest rate environment has induced a search

for returns to cover institutional investors' liabilities, channeling funds to riskier assets including emerging markets.

In sum, the growing demand for emerging market assets has certainly been affected by the improved "fundamentals", but, as long as their currency stays in a subordinate position, it is equally the product of a search for returns by institutional investors with soaring liabilities.

4 Conclusion

This paper has put forward an alternative approach for the analysis of capital flows to emerging markets. Starting from the limitations of the conventional literature, it developed a theoretical framework based on Post Keynesian monetary theory and institutional theories highlighting the rise of institutional investors as a key historical development for contemporary financial markets. In such a framework, capital flows to emerging markets are understood as the demand for emerging market assets by institutional investors. The mechanisms behind institutional investors' portfolio choice are therefore the key processes of interest for the understanding of capital flows to emerging markets and their stability. In particular, the paper underlined the role of "Keynesian fundamentals" and currency liquidity in the determination of emerging markets' asset characteristics, and the role of liabilities as a determinant of the risk appetite of institutional investors.

In the "age of asset management" (Haldane, 2014), institutional investors are likely to continue to play a key role in driving cross-border financial investment. Understanding their behaviour remains crucial promoting financial stability internationally, and in emerging markets in particular.

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[1] The literature refers to the former as "pull" factor and the latter as "push" factors. See Calvo et al. (1993) for the paper that established this framework of analysis. See Forbes (2012); Brana and Lahet (2010); Fratzscher (2012); Ahmed and Zlate (2014) for recent applications based on such a framework.

[2] See for example Masson (1999); Calvo and Mendoza (2000); Jinjarak and Zheng (2010); Jotikasthira et al. (2012).

[3] See for example Baek et al.,(2005); Gonzalez-Hermosillo, (2008); Ciarlone et al., (2009); Özatay et al., (2009); Petrova et al., (2010)

[4] This view echoes quite clearly what Schumpeter (1954, p. 686) terms the "monetary theory credit", a theory that sees "money as the only genuine and ultimate means of payment and the credit instrument that embodied a claim to money".

[5] See for example Mott (1985); Brown (2003); Tily (2012) for such an interpretation

[6] See Moore (1979); Lavoie (1984,2006); Chick and Dow (2002); for different expositions of the theory.

[7] A full exposition of the financial instability hypothesis is beyond the scope of this paper.

[8] To be sure, deteriorating domestic financial conditions may reinforce an existing cycle. For example, deteriorating levels of foreign exchange reserves as a result of capital outflows, may generate further concerns in foreign investors, thus sparking additional selloffs.

[9] In the sense of Coddington (1976).

[10] Indeed, as Biancareli (2009, p. 5) suggests, "liquidity cycles" could even replace the term capital flows due to the latter's association with the idea of a foreign savings/current account analysis, whereas the focus should be on private financial capital, which "seems to move without any close relation with the current account result".

[11] While praising Schumpeter's views on credit and capitalist development, Minsky was also highly critical of the inconsistency in Schumpeter's works. He especially blamed his ambiguous relations with Walrasian general equilibrium theories, which he found inconsistent with his early views as expressed in "The theory of economic development" (Minsky, 1983b, 1992).

[12] We focus here only on the last stage. See (Minsky, 1988a, 1992; Whalen, 2001) for a complete overview of the first three.

[13] Indeed the subtitle of the book refers to "capital market inflation, financial derivatives and pension fund capitalism".

[14] These allocations may appear small but translate into sizable numbers: as of October 2013 allocation to emerging markets' bonds and equities was roughly 1.85%, which considering the wealth of institutional investors of 46.531 trillion of US dollars in the same period, results

in about 860 billions US dollars of asset holdings. This is roughly equal to 21.5% of total portfolio liabilities of emerging markets at the end of 2013.